

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor(s): Bettina Steinmann; Alfred Steinmann	)	Attorney Docket No.: USA.353
	)	
Title: NANOPARTICLE-FILLED STEREOLITHOGRAPHIC RESINS	)	Express Mail Label No.: EU824529412US
	)	
Date Filed:	)	Customer No.: <b>022514</b>

**MS PATENT APPLICATION**

Assistant Commissioner for Patents  
U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

Without admission of prior art effect, Applicants call the Examiner's attention to the references listed on the attached form PTO-1449 pursuant to 37 C.F.R. §1.56 and §1.98. One copy of each reference is enclosed. This Information Disclosure Statement is being submitted prior to the receipt of a first Office Action pursuant to 37 C.F.R. §1.97(b)(3).

It is respectfully requested that the information be expressly considered during the prosecution of this application and that the references be made of record in this application and appear among the "References Cited" on any patent to issue from this application.

The following references are hereby submitted:

1. U.S. Patent No. 3,708,296 is made of record.
2. U.S. Patent No. 4,751,102 is made of record.
3. U.S. Patent No. 4,772,530 is made of record.
4. U.S. Patent No. 4,772,541 is made of record.
5. U.S. Patent No. 5,002,856 is made of record.
6. U.S. Patent No. 5,418,112 is made of record.
7. U.S. Patent No. 5,434,196 is made of record.
8. U.S. Patent No. 5,972,563 is made of record.
9. U.S. Patent No. 6,100,007 is made of record.
10. U.S. Patent No. 6,136,497 is made of record.
11. European Patent No. 0094915 (US4868288 corresponding with abstract)  
is made of record.
12. European Patent No. 0035969 (US4339567 corresponding with abstract)  
is made of record.
13. European Patent No. 0044274 (US4383025 corresponding with abstract)  
is made of record.
14. European Patent No. 0054509 (US4398014 corresponding with abstract)  
is made of record.
15. European Patent No. 0153904 (US4624912 corresponding with abstract)  
is made of record.
16. European Patent No. 0223587 (in English) is made of record.

17. European Patent No. 0094914 (Abstract only in English) is made of record.
18. European Patent No. 0164314 (Abstract only in English) is made of record.
19. European Patent No. 1029651 (English translation) is made of record.
20. "Novel Radiation Curable Nanocomposites with Outstanding Material Properties", Christof Roscher, Johannes Adam, Christian Eger & Manfred Pyrlik, Hanse Chemie, RadTech International North America, 2002.
21. "Nanotechnology", Hanse Chemie.
22. "Nanopox", Hanse Chemie, 2002.
23. "Nanocryl", Hanse Chemie, August 2002.
24. "Reinforcing Nanoparticles in Reactive Resins", T. Adebahr, C. Roscher and J. Adam, European Coatings Journal, April 2001.
25. "Nonagglomerated SiD<sub>2</sub> Nanoparticles", Hanse Chemie, European Coatings Journal, October, 2001.
26. Rapid Prototyping and Manufacturing, Fundamentals of Stereolithography, Paul F. Jacobs, P.H.D., Society of Manufacturing Engineers, 1992, pg.270.

The references included on this Information Disclosure Statement form the complete set of references known to the Applicants at this time which are believed to be relevant to the prosecution of the instant application.

<b>FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE</b> (Modified) <b>PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b>	<b>ATTY. DOCKET NO.</b> <b>USA.353</b>	<b>SERIAL NO.</b> To Be Determined
	<b>APPLICANT</b> Bettina Steinmann, Alfred Steinmann	
	<b>FILING DATE</b>	<b>GROUP</b> To Be Determined

(37 CFR 1.98(b)) Page 1 of 2

### U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUB-CLASS	FILING DATE
		3,708,296	1/2/73	Schlesinger			
		4,751,102	6/14/88	Adair			
		4,772,530	9/20/88	Gottschalk			
		4,772,541	9/20/88	Gottschalk			
		5,002,856	3/26/91	Anderson			
		5,418,112	5/23/95	Mirle			
		5,434,196	7/18/95	Ohkawa			
		5,972,563	10/26/99	Steinmann			
		6,100,007	8/8/03	Pang			
		6,136,497	10/24/00	Melisaris			

### 10 FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUB. DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB-CLASS	Translation YES NO	
		EP 0094915 (US4868288 and abstract attached)	11/23/83	Europe				
		EP0035969 (US4339567 and abstract attached)	9/16/81	Europe				
		EP0044274 (US4383025 and abstract attached)	01/20/82	Europe				
		EP0054509 (US4398014 and abstract attached)	06/23/82	Europe				
		EP0153904 (US4624912 and abstract attached)	9/4/85	Europe				
		EP0223587 B1(English translation)	5/27/87	Europe				
		EP0094914 (English abstract)	11/23/83	Europe				
		EP0164314 (English abstract)	12/11/85	Europe				
		EP1029651 (English translation)	8/23/00	Europe				

**OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)**

			"Novel Radiation Curable Nanocomposites with Outstanding Material Properties", Christof Roscher, Johannes Adam, Christian Eger & Manfred Pyrlik - Hanse Chemie, RadTech International North America, 2002.
			"Nanotechnology", Hanse Chemie
			"Nanopox", Hanse Chemie, 2002.
			"Nanocryl", Hanse Chemie, August 2002.
			"Reinforcing Nanoparticles in Reactive Resins", T. Adebahr, C. Roscher and J. Adam, <u>European Coating Journal</u> , April 2001
			"Nonagglomerated SiD <sub>2</sub> Nanoparticles", Hanse Chemie, <u>European Coatings Journal</u> , October 2001
			<u>Rapid Prototyping and Manufacturing, Fundamentals of Stereolithography</u> , Paul F. Jacobs, P.H.D., Society of Manufacturing Engineers, Dearborn, MI, 1992, pg. 270

**EXAMINER****DATE CONSIDERED**

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**EXAMINER:** Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Respectfully submitted,  
3D Systems, Inc.

Dated: *August 14, 2003*

A handwritten signature in black ink, appearing to read "Ralph D'Alessandro", written over a horizontal line.

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